REMARKS

Claims 1-35 are pending in this matter. This amendment and the enclosed remarks are submitted with a request for continued examination of the application. Applicants had previously submitted an amendment and response to the Final Office. In an Advisory Action mailed on 3-03-03, the Examiner had indicated that the proposed amendments would not be entered upon the grounds that they raise new issues that would require further consideration and/or research. Applicants have now amended claim 1 to include the limitations of claim 12. Claim 2 has been amended to deal with formalities. Claim 12 has been amended to add a new limitation, with support found at page 11 of the specification. Support for the amendment to claim 13 may be found throughout the specification, including at page 9. Claim 14 has been amended with support found in the claims and on page 11 of the specification. Claims 16-22 have been cancelled.

Claim 29 has been amended with support found in the claims and on page 11 of the specification. Claim 36 is new with support found in the specification at page 9. Claims 37-38 are new claims also, depending respectively from claims 36 and 13. Applicants respectfully submit that the attached amendments and remarks fully address the issues raised in the Office Action and respectfully request a complete reconsideration of the captioned application in view of the following remarks and amendments

Rejections Under 35 U.S.C. §§ 102 and 103

Claims 1-5, 9, 13-14, 16-18, 29, 31-32, and 34-35 were rejected under 35 USC 102(e) as being anticipated by Rabinovich (U.S. 6,256,675). Claims 6-8, 19, 30 and 33 were rejected under 35 USC 103(a) as being unpatentable over Rabinovich. Claims 10-11, 15, 21-22 were rejected under 35 USC 103(a) as being unpatentable over Rabinovich further in view of Shah, et al. (U.S. 6,298,381). Claims 23 and 25-28 were rejected under 35 USC 102(e) as being unpatentable over Bozman et al. (U.S. 6,385,699. Claim 24 is rejected under 35 USC 103(a) as being unpatentable over Bozman et al. The examiner objected to claim 12 as being dependent upon a rejected base claim but noted that it would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. Applicant thanks the examiner for this indication of allowable matter.

The Examiner rejected claim 1 over Rabinovich. Claim 1 has been amended to include the limitations of claim 12, previously noted to contain allowable subject matter by the examiner. Thus, applicants submit that claim 1 and dependant claims 2-12 are in allowable form.

Claim 13 was previously rejected by the examiner over Rabinovich. Claim 13 has been amended to further describe the clients and the servers. Applicants submit that Rabinovich's teaching as to the nature of the host and the requestor are distinguishable from the server and clients recited in claim 1.

Rabinovich relates to selecting host servers by distributing requests for an object among replicas of the requested object and manages the placement of replicas of objects. (6:1-6). A request distributor assigns the request to a host based upon a request metric (e.g., a count of the number of requests for the object made by the request distributor to the host) and distance metric (e.g., the cost of communicating between the requestor and the host. (7: 30-38). The request distributor assigns a host that stores the replica to respond to the request based on the request metric and distance metric of the host in relation to the similar metrics of the other hosts that also store replicas of he object. (7:39-44).

But Rabinovich teaches selecting a server, such as host 103 shown in FIG. 2, to respond to a request from a specified requesting client, such as requestor 109, shown in FIG. 2. Rabinovich, however, fails to teach or suggest predicting the location of clients not currently requesting the content or loading to one of two alternative servers not currently storing the content. Whether Rabinovich is discussing selecting a sever to fill a client request or migrating content from one secondary source to another, Rabinovich teaches that at least one of the servers considered must already contain the content. Thus, Rabinovish fails to teach or suggest all elements of claim 13.

That is, Rabinovich teaches considering a distance metric of a host already storing the requested object to the requestor and a consideration of the distance metric of a candidate host, the second host to the requestor. For example, this is taught in the context of <u>migration</u> of a replica from the first host (i.e., containing the object) to a second host (to which it is beneficial to migrate the object. (See col. 9) Thus, in evaluating the distance metrics with respect to migration of objects, Rabinovich teaches only looking at a first host (already containing the content) and a second host that doesn't store the content but is a candidate to so store it. Hence, Rabinovich fails to teach or suggest all elements of the method of loading content to a server in anticipation

of the need for the content as recited in claim 1, including determining a first proximity between the client or group of clients and a first server not currently storing but capable of storing and serving the content; determining a second proximity between the client or group of clients and a second server not currently storing but capable of storing and serving the content; and based upon the relative values of the first and second proximities, loading the content into one of the first and second servers. Thus, for at least this additional reason, Rabinovich fails to teach all elements of claim 13. For this same reason, Rabinovich fails to teach or suggest the elements of new claim 36.

Claims 14 and 29 have been amended to include an additional limitation of weighting the proximity factors based on the type of content. Rabinovich fails to teach or suggest such a limitation. Although Rabinovich generally describes a distance metric (col. 7, lines 30-37) no suggestion is made as to a connection between the type of content and any elements comprising the distance metric. Thus, for at least this reason, claims 14 and 29 are submittedto be allowable over Rabinovich..

Claims 23 and 25-28 were rejected under 35 USC 102(e) as being unpatentable over Bozman et al. (U.S. 6,385,699). Claim 24 is rejected under 35 USC 103(a) as being unpatentable over Bozman et al. The examiner stated on page 7 of the office action that Bozman discloses that the object with the minimum penalty is replaced and that a comparison algorithm is used in determining the lowest penalty. Bozman fails to suggest using any factors to determine replacement cost other than the latency, bandwidth, and availability of the storage repository (5: 35-45) or as to a network connection, latency or average bandwidth for data transfers (6:5-30). Claim 23 has been amended to delete bandwidth from the specific factors recited. Thus for at least this reason, Bozman fails to teach or suggest all elements of claim 23. Further as to claim 28, Bosman fails to teach the determination of first and second proximities using a combination of the specific factors mentioned. As noted above, the specific factors disclosed by Bozman include latency, bandwidth, and availability of the storage repository (5: 35-45) or as to a network connection, latency or average bandwidth for data transfers

Claim 29 is a content control system claim and has been amended to indicate that the factors selected for the proximities are weighted based upon the type of content as discussed above. Neither Rabinovich nor any of the other references cited teach or suggest such a

limitation. Hence, applicant respectfully submits that Rabinovich fails to teach or suggest all of the elements of claim 29.
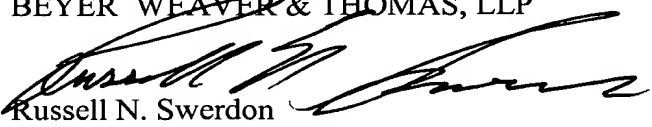
Claim 36 is new and is submitted to be allowable as specifically discussed above in the discussion regarding claim 13.

Claims 2-12, 15, 24-28, and 30-35 and 37-38 are dependant claims, depending respectively from independent claims 1, 14, 16, 23, and 29. Thus, at least due to these dependencies, the dependent claims are submitted to be in allowable form. Further, the dependent claims recite additional elements which when taken in the context of the claimed invention further patentably distinguish the art of record. The additional limitations recited in the dependent claims are not further discussed as the above-discussed limitations are clearly sufficient to distinguish the claimed. Withdrawal of the rejections is respectfully requested.

Conclusion

Accordingly, it is submitted that all issues in the Office Action have been addressed, and withdrawal of the rejections is respectfully requested. Applicant believes that this application is in condition for allowance, and requests a prompt passage to issuance. If the Examiner believes that a telephone conference would expedite the prosecution of this application, he is invited to contact the Applicant's undersigned attorney at the telephone number set out below.

Respectfully submitted,
BEYER WEAVER & THOMAS, LLP

Russell N. Swerdon
Registration No. 36,943

P.O. Box 778
Berkeley, CA 94704-0778
(510) 843-6200